ative to Japan and Europe, in many important emerging technologies and risks losing much of the \$350,000,000,000 United States market and \$1,000,000,000,000 world market expected to develop by the year 2000 for products based on emerging technologies:

"(D) it is in the national interest for the Federal Government to encourage and, in selected cases, provide limited financial assistance to industry-led private sector efforts to increase research and development in economically critical areas of technology;

"(E) joint ventures are a particularly effective and appropriate way to pool resources to conduct research that no single company is likely to undertake but which will create new generic technologies that will benefit an entire industry and the welfare of the Nation:

"(F) it is vital that industry within the United States attain a leadership role and capability in development, design, and manufacturing in fields such as high-resolution information systems, advanced manufacturing, and advanced materials; and

"(G) the Advanced Technology Program, established under section 28 of the National Institute of Standards and Technology Act (15 U.S.C. 278n), is the appropriate vehicle for the United States Government to provide limited assistance to joint development within the United States of new high technology capabilities in fields such as high-resolution information systems, advanced manufacturing technology, and advanced materials, and can help encourage United States industry to work together on problems of mutual concern.

"(2) The purposes of this section [amending this section and section 272 of this title and enacting provisions set out as notes under this section and section 271 of this titlel are—

"(A) to strengthen the Advanced Technology Program created under section 28 of the National Institute of Standards and Technology Act (15 U.S.C. 278n), and to provide improved guidelines for the allocation of Advanced Technology Program funds appropriated under the authorizations contained in section 105 of this Act [amending sections 278k and 4632 of this title and provisions set out as a note under section 278l of this title];

"(B) to promote and assist in the development of advanced technologies and the generic application of such technologies to civilian products, processes, and services:

"(C) to improve the competitive position of United States industry by supporting industry-led research and development projects in areas of emerging technology which have substantial potential to advance the economic well-being and national security of the United States, such as high-resolution information systems, advanced manufacturing technology, and advanced materials; and

"(D) to support projects that range from idea exploration to prototype development and address long-term, high-risk areas of technological research, development, and application that are not otherwise being adequately developed by the private sector, but are likely to yield important benefits to the Nation."

## COMPREHENSIVE REPORT ON ADVANCED TECHNOLOGY PROGRAM

Section 201(f) of Pub. L. 102-245 provided that: "The Secretary shall, not later than 4 years after the date of enactment of this Act [Feb. 14, 1992], submit to each House of the Congress and the President a comprehensive report on the results of the Advanced Technology Program established under section 28 of the National Institute of Standards and Technology Act (15 U.S.C. 278n), including any activities in the areas of high-reso-

lution information systems, advanced manufacturing technology, and advanced materials."

NATIONAL ACADEMIES OF SCIENCES AND ENGINEERING STUDY OF GOVERNMENT-INDUSTRY COOPERATION IN CIVILIAN TECHNOLOGY

Section 5131(c) of Pub. L. 100-418 provided that:

"(1) Within 90 days after the date of enactment of this Act [Aug. 23, 1988], the Secretary of Commerce shall enter into contracts with the National Academies of Sciences and Engineering for a thorough review of the various types of arrangements under which the private sector in the United States and the Federal Government cooperate in civilian research and technology transfer, including activities to create or apply generic, nonproprietary technologies. The purpose of the review is to provide the Secretary and Congress with objective information regarding the uses, strengths, and limitations of the various types of cooperative technology arrangements that have been used in the United States. The review is to provide both an analysis of the ways in which these arrangements can help improve the technological performance and international competitiveness of United States industry, and also to provide the Academies' recommendations regarding ways to improve the effectiveness and efficiency of these types of cooperative arrangements. A special emphasis shall be placed on discussions of these subjects among industry leaders, labor leaders, and officials of the executive branch and Congress. The Secretary is authorized to seek and accept funding for this study from both Federal agencies and private industry.

"(2) The members of the review panel shall be drawn from among industry and labor leaders, entrepreneurs, former government officials with great experience in civilian research and technology, and scientific and technical experts, including experts with experience with Federal laboratories.

"(3) The review shall analyze the strengths and weaknesses of different types of Federal-industry cooperative arrangements in civilian technology, including but not limited to—

"(A) Federal programs which provide technical services and information to United States companies;

"(B) cooperation between Federal laboratories and United States companies, including activities under the Technology Share Program created by Executive Order 12591 [15 U.S.C. 3710 note];

"(C) Federal research and technology transfer arrangements with selected business sectors;

 $\lq\lq$ (D) Federal encouragement of, and assistance to, private joint research and development ventures; and

"(E) such other mechanisms of Federal-industry cooperation as may be identified by the Secretary.

"(4) A report based on the findings and recommendations of the review panel shall be submitted to the Secretary, the President, and Congress within 18 months after the Secretary signs the contracts with the National Academies of Sciences and Engineering."

## SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in sections 272, 278 of this

## § 2780. User fees

The Institute shall not implement a policy of charging fees with respect to the use of Institute research facilities by research associates in the absence of express statutory authority to charge such fees.

(Mar. 3, 1901, ch. 872, §30, as added Aug. 23, 1988, Pub. L. 100–418, title V, §5161, 102 Stat. 1450.)

## § 279. Absence of Director

In the case of the absence of the Director of the National Institute of Standards and Tech-